ABSTRACT

The present invention provides a reliable and
high-speed data transfer method that achieves a high
5   transfer efficiency and a high application processing
efficiency concurrently and a disk control unit (disk
controller) using such a method. In reliable data
transfer in which, when data is transferred from an
initiator to a target, the data received by the target
10   is checked for validity by using an error check code
attached to the data, a transfer status indicating
whether the data is valid is returned from the target
to the initiator, and, if a transfer error occurring
during the data transfer is detected by the transfer
15   status, the initiator retries to transfer the data to
the target, a data transfer method for logical records
that are units of data transfer between the initiator
and the target is disclosed. This method is
characterized in that: when each logical record
20   transferred by a transfer request issued by the
initiator arrives correctly on the target, the target
posts a completion status corresponding to the transfer
request for the logical record to a completion queue
existing in the target; a plurality of logical records
25   in a block are batch transferred; the initiator
confirms the transfer status at every batch transfer;
and, for each logical record that meets a predetermined
batch transfer condition, the target posts a completion

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status corresponding to the transfer request for the logical record to the completion queue existing in the target upon correct reception of the logical record.